

From: glowbugs@sco.theporch.com Tue Mar 25 18:48:52 1997  
Return-Path: <glowbugs@sco.theporch.com>  
Received: from sco.theporch.com (sco.theporch.com [207.234.31.38])  
by uro.theporch.com (8.8.5/AUX-3.1.1)  
with ESMTP id SAA08445 for <shimshon@uro.theporch.com>;  
Tue, 25 Mar 1997 18:48:49 -0600 (CST)  
From: glowbugs@sco.theporch.com  
Received: from sco.theporch.com (localhost [127.0.0.1])  
by sco.theporch.com (8.8.5/SCO-5.0.2) with SMTP  
id AAA05771; Wed, 26 Mar 1997 00:35:55 GMT  
Date: Wed, 26 Mar 1997 00:35:55 GMT  
Message-Id: <970325193355\_-1873000617@emout16.mail.aol.com>  
Errors-To: ws4s@infoave.net  
Reply-To: glowbugs@sco.theporch.com  
Originator: glowbugs@sco.theporch.com  
Sender: glowbugs@sco.theporch.com  
Precedence: bulk  
To: Multiple recipients of list <glowbugs@sco.theporch.com>  
Subject: GLOWBUGS digest 486  
X-Listprocessor-Version: 6.0 -- ListProcessor by Anastasios Kotsikonas  
X-Comment: Please send list server requests to listproc@sco.theporch.com  
MIME-Version: 1.0  
Content-type: multipart/mixed;  
Status: 0

#### GLOWBUGS Digest 486

Topics covered in this issue include:

- 1) Free TV tubes  
by Jeffrey Herman <jeffreyh@hawaii.edu>
- 2) Moving? I don't know...  
by "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
- 3) Re: Stainless steel wire  
by "Peter L. Demmer" <ampruss@hits.net>
- 4) Re: Regens and Superhets  
by rdkeys@csemail.cropsci.ncsu.edu
- 5) Re: Regens and Superhets  
by "Terry L. Dobler" <kj7f@micron.net>
- 6) Re: Regens and Superhets  
by rdkeys@csemail.cropsci.ncsu.edu
- 7) Regens and Superhets  
by "Rhett T. George" <rtg@ee.duke.edu>
- 8) Catalog for your reference  
by TRIODEEL@aol.com

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Date: Mon, 24 Mar 1997 17:10:13 -1000  
From: Jeffrey Herman <jeffreyh@hawaii.edu>  
To: boatanchors@sco.theporch.com, glowbugs@sco.theporch.com  
Subject: Free TV tubes  
Message-ID: <97Mar24.171020hwt.188179(3)@uhunix3.its.Hawaii.Edu>

Anyone in the Portland area - better pick these up! But write  
to \*him\* and not me! // Jeff KH2PZ

>Bunch (several shoeboxes) of TV compactrons and high-voltage  
>tubes. Some NIB, some used. Free to whomever wishes to  
>come by this week and pick them up local in Portland, OR area.  
>Otherwise this coming weekend they go in the trash or out onto the  
>plinking range. Please reply via email.  
>mgaidos@wv.mentorg.com

-----  
Date: Mon, 24 Mar 1997 21:25:39 -0600  
From: "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>  
To: glowbugs@sco.theporch.com  
Subject: Moving? I don't know...  
Message-ID: <3.0.32.19970324212507.006e01f4@postoffice.worldnet.att.net>

At 01:37 AM 3/25/97 +0000, you wrote:

>

>Is everyone moveing to boatanchors@tempe.gov ?

No, I'm still here. I may (?) get a subscription to both glowbugs &  
boatanchors.

Just haven't decided yet. If I don't then you will see me at the new BA  
listserver.

Lets keep going as long as we can OK?

Robert M. Bratcher Jr.

E-mail to:

bratcher@worldnet.att.net

Record collector, 8mm, super 8, 16 and 35mm Film collector.

I like old radio's too.

Collins, Hallicrafters, National & Hammurland are my Favorites!

-----  
Date: Mon, 24 Mar 1997 20:16:43 -1000  
From: "Peter L. Demmer" <ampruss@hits.net>  
To: mkelly@faraday.dialix.com.au

Subject: Re: Stainless steel wire  
Message-ID: <33376DCB.4F21@hits.net>

Murry;

IMMHO, stainless steel (SS), seems to work very ok as an electrostatic wire antenna. I used it in my 4 element, 4 band Quad for years with great success. The elements were the typical full wave length square with the  $0.125 \lambda$ , element to element spacing. The only time I had a SS antenna problem was in a design of a small loop antenna (less than  $1/4$  wave in length) which is fundamentally a magnetic (h) field receiving and transmitting type antenna. The problem is that all so named, stainless metal sheet or wire consists of and is of a certain amount of (iron) ferroalloy. Even nuclear grade SS has ever so little, yet contains some Ferric elements. Any ferric material responds erratically to magnetic h field electron polar shifting disturbances at radio frequencies. In my own test case antenna, it would not exhibit nor respond to the well known hi-Q narrow bandwidth characteristics of a better electrical conductor with a comparatively larger magnetitude of relatively free electrons (copper or aluminum). In my tests the SS small loop antenna exhibited characteristics of a wide and erratic bandwidth, dummy loading of varying unstable impedances. On the other hand, SS antennas such as simple fractional wave length, vertical whips, full or half wave length dipoles and full wave loops have worked for the most part, effectively and efficiently. This will hold true so long as the antenna you are considering is so designed to take advantage of its electrostatic and not its iron sensitive, electromagnetic radiating properties. An equally important feature in the design must address the antenna coupling as well. There is always the necessity to employ (again) (e) electrostatic or (h) electromagnetic RF feeder coupling. On this list, there is a wealth of knowledge and experience far greater than mine own. 72/3 Peter KH6CTQ

-----  
Date: Tue, 25 Mar 1997 14:16:11 -0500 (EST)  
From: rdkeys@csemail.cropsci.ncsu.edu  
To: hamradio@mm1001.theporch.com  
Cc: glowbugs@theporch.com  
Subject: Re: Regens and Superhets  
Message-ID: <9703251916.AA131521@csemail.cropsci.ncsu.edu>

>  
> Is everyone moveing to boatanchors@tempe.gov ?

Dunno, yet. I am keeping my feet in the works as long as I am welcome, but the tempe group is an interesting crowd, that is a good adjunct

to the regular group. Also, various other things are brewing here and there. Who knows how the dust will finally settle. Me, I still wear the BA/GB cap, regardless.....(:+{}{}.....

> I have been thinking about the above topics superhets and regen receivers  
> and am torn between the two. I want to build the simplest receiver that I  
> can consistant with good performance. Good Sensivity and selectivety with  
> the leas amount of components. I am thinking about combineing the superhet  
> and regen like in the Simple-X series in my 1962 ARRL Handbook. However I  
> seem to never be satisfied with the caned receivers so I am thinking about  
> makeing a receiver like the one in the 1857 handbook but useing more  
> modern tubes.

Simple supers with regenerative IF's and second detectors have been around for a long time. They work well, and get around some of the problems associated with a normal regen, but the are not necessarily any better, as I will hope to describe, below. But, they will never be a good signal signal receiver, unless you have some mean tuned circuits in a VERY LOW IF strip. Else, you need filters, and that defeats the idea of the regenerative IF.

What the regenerative IF does VERY WELL is tighten up the selectivity of the passband through the IF. Add a regenerative second detector after that, and you can get very good selectivity, second to none, but not single signal selectivity. It will always be double signal because the detector can be heterodyned either side of the IF. If you really tighten up the IF at VERY LOW IF frequencies, like 50khz or less, you can begin to get a single signal reception. For example, on the RAK receiver down at 20khz, you can detune 1khz and effectly drop the signal out of the passband. That is about as close as one can get a regenerator to being single signal. The TRF stages are acting like a tuneable passband IF strip, and they really will cut the sidebands off a signal in a hurry. You have to hear it to believe it, and use broad headphones that will pass the entire audio spectrum from dc to 10khz or so. It becomes very apparent of the HIGH LEVEL of selectivity capable in these regens at those frequencies as you set the regeneration on the edge and audibly hear the passband narrow down to a couple of hundred cycles. If that is what you are trying to do, then a regenerative IF coupled with a good regenerative detector will be as good as the latest sandystate box, or better, but it will always be double signal to some extent. Just remember to keep your coupling loose throughout because the regen detector is much more sensitive than you think (remember it is a square law detector).

> I would like coments from everyone on my Ideas.  
>  
> Here is the lineup.  
>

> 1. A 6U8 or similar tube as first mixer and local oscillator feeding an IF  
> transformer at 1700 KHZ using a 1700 KHZ IF so that I can use band  
> imaging.

Basically good, but you will probably have to wind your own IF cans  
these days, unless anyone has an spares around for that QRG. See the  
1925-1932 QST's for how to wind good IF transformers yourself.

> 2. A 6bE6 as crystal controlled second mixer. I like this tube since it  
> has good gain and is simple. This would convert to 85 KHZ using an old  
> command IF Xformer that I have for the IF. This stage would have the RF  
> gain control since the 6be6 can be gain controlled.

Basically good. Standard technology.

> 3. A 6U8 as a regenerative detector with the triode section the BFO for  
> CW/SSB. Use capacitors for feedback or maybe a tickler hand wound varying  
> the screen voltage for regeneration control. I am wondering how the  
> selectivity will be at 85 KHZ. Should I get good single signal CW  
> selectivity. The BFO will be injected into the grid with a small tickler  
> or maybe stray tube capacitance. I have also thought about using old TV  
> stabilizer coils as IF Coils at 100KHZ or maybe padding the Command coils  
> down to 50 KHZ as an alternative to 85 KHZ.

Dunno why you want an external heterodyne, although at low IF's it can  
be advantageous if you are trying to passband the IF and make it variable  
in passband tuning. The best VLF receivers are heterodynes, with the  
regens like the RAK a very close second. The heterodyne sets require  
an extra stage of RF because they don't have regenerative amplification,  
usually, although you can add detector regeneration to tighten up  
selectivity and increase gain, AND use an external heterodyne for  
the detection. Either way will work well, with a slight edge to the  
heterodyne method.

> 4 A 6U8 or some Triode/Pentode as audio pre-amplifier/Power Amplifier  
> since I like speaker capability.

Works fine for me. Take headfones off of a 0.1-1uF or so coupling cap  
off the transformer high side or use 8 ohm headfones, or use a combo  
output xfmr with a 500/600 ohm tap to run fones and a 8 ohm tap for speaker.

> I am torn between an IF stage for gain/selectivity and the regenerative  
> detector for gain/selectivity. I could easily add a 6ba6 for the IF and  
> have AVC and all those neat things but this would deviate from simple. I  
> have already compromised by going to dual conversion since I know that  
> more selectivity is available at the low freq IF's than at 1700 KHZ.

Put your selectivity in both places. Use the IF to tighten up the selectivity

to 1khz or so and the detector selectivity to cut it down to 200hz or so.

>

> My first home brew receiver was a regenerative with at least 1 pentode and  
> maybe two. I don't remember anymore. I still remember listening to SW  
> broadcast with that regenerative receiver. And adjusting the regeneration  
> on the edge for best gain and selectivity.

>

> One concern about regeneration at 50-100KHZ is the ringing from the high Q  
> as one approaches regeneration. I suppose that that could be a pain.

It does not happen. That is a myth. Never happens on any of my sets if the parameters are set right. You are using a 50-100khz IF to GET MORE selectivity. Even with several stages, it will not be sufficient to ring. You will drop the AM to mush and lose much of the SSB sideband, though. It is like passing AM or SSB through a tight 500hz or 250hz filter on the sandstate box. The sandstate boxes will actually ring some as will xtal filter sets when you do that if they were not designed quite right. An OT regenerator will just narrow the passband down do nothing.

> The temptation is real strong to add the IF and a product detector and AGC  
> and S-meter for a higher performance design. It could be done with just 1  
> more tube by using the dual triode as the product detector/BFO and a  
> silicon diode as an AGC rectifier. Would be pretty neat but I find it hard  
> to decide what to do.

Why get so complex? If you want to do that, build the HBR-10 or whatever that fancy 10-tube superhet was in the 60's handbooks. That is altogether different from a regenerative style set.

> When all this is done I plan to also include in the box a QRP level  
> transmitter maybe 6t9 or some other dual tube crystal controlled as the  
> transmitter.

>

> This rig will be set up for 80 and 40 meters.

Sounds good to me.

> Kevin Pease  
> WB0JZG  
> Mount Juliet, TN.

73/ZUT DE NA4G/Bob UP

-----

Date: Tue, 25 Mar 1997 11:43:33 -0700

From: "Terry L. Dobler" <kj7f@micron.net>  
To: glowbugs@sco.theporch.com  
Subject: Re: Regens and Superhets  
Message-ID: <2.2.32.19970325184333.002c8928@pophost.micron.net>

Gang,

Regen Bob replied:

<snippo>

>> One concern about regeneration at 50-100KHZ is the ringing from the high Q  
>> as on aproches regeneration. I suppose that that could be a pain.

>

>It does not happen. That is a myth. Never happens on any of my sets if  
>the parameters are set right. You are using a 50-100khz IF to GET MORE  
>selectivity. Even with several stages, it will not be sufficient to ring.  
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>xtal filter sets when you do that if they were not designed quite right.  
>An OT regenerator will just narrow the passband down do nothing.

>

Carl (KM1H?)raised the question of using a regen detector for VHF/UHF  
weak signal use over on the VHF reflector but I don't think much or  
any of it appeared here. My question for Bob, or anyone else who  
would like to take it, is.... would the regen make a good weak signal  
detector? If you have spent any time with a weak signal link  
calculator it would appear that all you have to do is reduce the  
bandwidth of the receiver and the signal will come up out of the  
noise. This is not the case for my poor ears as the ringing becomes  
stronger as narrower filters are used. I find I can copy better  
with a 2.4 KHz filter than with a 500 Hz filter. I have tried a  
40 Hz DSP based filter and the results were terrible. If you could  
reduce the reciever bandwidth with a regen detector and have no  
ringing it might be a very interesting experiment. Has anyone one  
the reflector tried such a scheme? Thoughts anyone?

Terry KJ7F

-----

Date: Tue, 25 Mar 1997 17:45:47 -0500 (EST)  
From: rdkeys@csemail.cropsci.ncsu.edu  
To: kj7f@micron.net  
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com  
Subject: Re: Regens and Superhets  
Message-ID: <9703252245.AA131733@csemail.cropsci.ncsu.edu>

> Carl (KM1H?) raised the question of using a regen detector for VHF/UHF  
> weak signal use over on the VHF reflector but I don't think much or  
> any of it appeared here. My question for Bob, or anyone else who  
> would like to take it, is.... would the regen make a good weak signal  
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> with a 2.4 KHz filter than with a 500 Hz filter. I have tried a  
> 40 Hz DSP based filter and the results were terrible. If you could  
> reduce the receiver bandwidth with a regen detector and have no  
> ringing it might be a very interesting experiment. Has anyone one  
> the reflector tried such a scheme? Thoughts anyone?  
>  
> Terry KJ7F

Terry, we all suffer a bit from the old ringing ears syndrome as we age. Oh, well. The regen detector is a square law detector which is most sensitive down on the low end of the curve. I have only used these things on HF, up to about 22mhz or so. The detectors have always been VERY sensitive. Unfortunately, they are also very sensitive to noise. If the noise floor (from atmospheric) is high, then that is way over the internal detector noise. Since I can only hear down to the noise usually (some OT pfarts can copy well down into the noise) the regen detector in that case is as sensitive as the best sandboxes. I have no good feeling for how well they would do up in VHF. In the old days, regens were often used up on 5 meters, until superregen slush boxes came along. They seemed to work pretty well there. My expectation is that compared to a plain mixer/bfo type of combination, at usual IF frequencies of 30mhz and below, the regen detector will always be much more sensitive and if set correctly much more selective than any ``modern'' detector. It has its drawbacks, in that it requires some degree of fiddling to get it optimized for a given set of conditions, especially if you like to push the ragged edge of regeneration like I do. I don't have any hard laboratory data to support that though. Perhaps a 955 tube or one of the nuvistors might work well enough up to do in a high IF strip. The way I would check it in place would be to design a detector and some sort of audio (fet and LM-xxxx chip) and run that on a bnc output from the IF strip lightly coupled to the existing detector and compare the two. If the regen detector was way off in sensitivity compared to the modern detector (and I can't offhand fathom why that would happen), then junk it. If the regen detector was at least as sensitive as the existing detector, then it should work pretty well. It will always be more sensitive than a linear detector on weak signals, but will be more prone to static noise. The only thing I can think of offhand that would get in the way would be device noise in the detector device itself. The transistors and fets I have tried



in regen sets don't seem to be as quiet as the tubes in my hands. I have used 2N2819's and the like before and they made fair to good regen detectors, but they were very tricky to get stable compared to a tube in my hands. They were also somewhat more sensitive than the tubes if you hand-picked a good one. They were also very touchy to get good smooth control of regeneration so the ragged edge could be had. Gee, maybe that might be fun to try on the IF output from a converter of some sort. Hmmm.... sounds like some experimenting may be in order.

73/ZUT DE NA4G/Bob UP

-----  
Date: Tue, 25 Mar 1997 16:30:11 -0500  
From: "Rhett T. George" <rtg@ee.duke.edu>  
To: glowbugs@sco.theporch.com  
Subject: Regens and Superhets  
Message-ID: <199703252130.QAA24149@washington.ee.duke.edu>

- Greetings -

Terry and Bob have been carrying on a fine discussion of bandpass narrowing, perhaps in response to Carl's question. Yes, ringing accompanies the narrowed passband. In the limit, the single frequency which is passed occupies all of time. That is a long while to wait for the next component of a Morse character.

This behavior is known in the physics realm as the Heisenberg Uncertainty Principle. If the energy/frequency is known quite closely, the time of occurrence is uncertain, and vice versa.

The Fourier Integral may tell more about this than you ever wanted to know.

73 Rhett George - KE4HIH

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Date: Tue, 25 Mar 1997 19:34:19 -0500 (EST)  
From: TRIODEEL@aol.com  
To: glowbugs@sco.theporch.com  
Subject: Catalog for your reference  
Message-ID: <970325193355\_-1873000617@emout16.mail.aol.com>

--PART.BOUNDARY.0.28926.emout16.mail.aol.com.859336435

Content-ID: <0\_28926\_859336435@emout16.mail.aol.com.8187>

Content-type: text/plain

I have been reading with interest the mail I've been getting as a member of your list.  
I'm not trying to SPAM people, but since you are using tubes, thought you or other recipients might be interested in my company's products.

Best Regards, Ned Carlson  
Triode Electronics, Chicago

--PART.BOUNDARY.0.28926.emout16.mail.aol.com.859336435

Content-ID: <0\_28926\_859336435@emout16.mail.aol.com.8188>

Content-type: text/plain;

name="ALLSTUFF.TXT"

Content-Transfer-Encoding: quoted-printable

Our What We Say Is What You Get policy means that we don't relabel tubes with phony brand names, or put fancy gold lettering and =

boxes on them, or tell you that little elves in the Black Forest =

made them in order to charge you 5 or 10 times what they're worth. =

We guarantee the goods you get are actually the brand =

and type advertised. Power tubes are tested and matched at typical =

operating voltages and dissipation using our nifty British =

military valve checker.

Most Popular Tubes ...Prices,Availability are subject to change.

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fraction of NOS prices! Tesla ECC83 7.95 =

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12AT7..Yugoslav 5.95 Sylvania/Philips ECG 12AT7WA 7.95  
Mullard British military =93CV4024=94 12AT7WA 19.95  
6DJ8 and equivalent (E88CC,E188CC,6922,7308) Russia 6922 7.95  
Tesla 6922/E88CC(Slovakia) 7.95 =

Siemens-WGermany NOS 1962,JAN-NATO military gold pin 6922 24.95.  
KT88 Tesla (Slovakia) KT88 copy of British. 79.95 matched pair  
Russian 6550C clear bulb-Very nice quality 39.90 match pair  
6CA7/EL34 EL34-G Russia thin bulb-like Siemens 19.95 matched pair  
6CA7/EL34 Russia fat bulb (Looks like GE ) 24.95/match pair  
6CA7/E34L Tesla (Slovak) nice copy of Mullard 24.95/ matched pair  
Dynaco ST70/MK4 should use EL34-G or Tesla =

Mark II can use all 3 types.  
6L6-GC/KT66..Russia 6L6WGC/5881 16.90/mpair =

Russia 6L6-GC 11.90/mpair =

6L6WGB/5881 Philips ECG/Sylvania 29.95/matched pair =

KT66 blue glass Chinese, selected, looks cool! \$39.95/pair  
350B Chinese, looks like WE, up to 600V Va, sub KT66 \$59.95/ mpair  
6V6-GT Russia 3.95 each =

807 Russian 14.95 =

British ITT 5B/254M same as 807 but 1/4 inch cap, 19.95  
6BG6-G Russian Same as 807, but octal base & better price! 5.95  
5AR4/GZ34 Russia (new improved type) 8.95 =

5AR4/GZ34 Chinese 7.95  
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300B Russian, Chinese, Cetron, WE, etc Call for avail and price  
Russian Tubes 5U4-G 5.95 6AS7-G 7.95 6BQ5/EL84 3.95 =

6C33 call for avail 6EU7 9.95 6N7-GT 3.95 6SJ7 3.95 6SL7-GT 3.95 =

6SN7-GT 5.95 811A call 6267/EF86 call for avail 7189/EL84-M 7.95 =

7199 8.95 6B4-G Russian 29.95  
Other popular tubes Lots more not listed, please call!! =

(call for info onstock) =

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6CG7/6FQ7(USA) 14.95 6CW4 8.95 6DL4/EC88 4.95 6FQ7 USA.see 6CG7 =

6FQ7 9.95 6GK5 USA 5.95 6GW8/ECL86 3.95 6J7 3.95 6SC7 6.95 =

6V4 3.95 6X4 3.95 12BH7 (yugo) 9.95 12BY7 14.95 =

12X4 3.95 5751 see below 5879 7.95 5965 5.95 7247/12DW7 14.95 =

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to stock ON HAND, If you need more info please ask first. =

Guaranteed unused NOS

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6AU5-GT 1.50 6AX4-GTA 1.50 6BK5 50=A2 6BN6/6KS6 1.95 =

6CB6 1.50 6DG6 1.95 6DT6A 50=A2 6EH7/EF183 75=A2 6EW6 1.50 =

6GK5(Japan) 1.50 6GK5 GE 2.95 6GF7 2.95 6GS7 50=A2 6HA5/EC900 95=A2 =

6JB5/6JC5 95=A2 12AL5 25=A2 12EK6/12DZ6 50=A2 403B/5591 1.95 407A 1.00 =  
=

408A 1.00 5670/2C51W 1.95 5920/E90CC 1.50 6689/E83F 3.95 =

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National type '50, 1994 date code. Looks like a 300B! \$125 ea

Philips ECG Tubes 12FQ7 (Italy) 6.95 6GH8 (USA) 4.95

6F8-G A large bulb 6SN7-G, one of the grid leads on cap. 4.95

6V6-GT, NOS early 60's mfr USA, various mfr, 14.95 each =

Good used 6V6-GT USA 9.95 ea

6V6-GTA RCA & Sylvania 19.95

6V6-GT/CV511 made by STC (UK equiv of WE) British mil 17.95 each

6SN7-GT/GTA/GTB, various mfr new old stock USA mfr, 9.95 ea

12SN7-GT and 12SL7-GT, a 6SN7 or 6SL7 but 12V fil, NOS USA, 3.95

DG7-32 Marantz 10B scope tube, Mullard (england ) 69.95

DG7-32 Tungsram (Hungary) \$49.95

5751 Sylvania gold pin, NATO military grade NOS 24.95

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Computer grade capacitors! 1900 uF 250V 4.95 580 uF 400V 4.95 =

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Sprague 800 volt 715P polypropylene cap, .0033 or .0047 uF .29 ea

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=2E0047 1600V, .0068 1KV .39 each =

Roderstien .037-400V axial polypropylene .29 each

Sprague 410P Axial .15 uF 300V .29 ea =

F-Dyne .022-400V axial .29 each

ALPS 50K stereo combo Volume/Balance control, large case, detents 9.95

Noble 250K volume control cast case, cond plastic 19.95

ALPS 24 pos 4 deck switches with =

PC boards for stepped atten, 24.95 ea

Terminal strips, Phenolic Bag of 30 pcs 1.95

Soldering Irons, big ones for thick metal.

Wood handle. 60W 4.95, 100W 6.95

Transformer, #23V17 (Thordarsen) 117V 300 ma , open frame 9.95

Transformer, Triad F-90X, multiple taps 10V to 40V, 4.95 ea

Tube tester xfmr, multiple fil taps 1.5 to 117V, B+, =

rectifier windings 9.95

Choke, Stancor #C2344 1.5H 10ma, 1500V hipot 1.95 ea

Sockets, Octal (for 6Z34, 6EL34, 6550, 6L6, etc) British Micanol =

(brown plastic) McMurdo phosphor bronze contacts,

J1 1/2" mnt centers 2.95 each

9 pin ceramic chassis mount w/ shield 1.95 each

9 pin chassis mount McMurdo socket, similar to above 1.95

9 pin ceramic chassis mount with shield, fits 12AX7/6DJ8, 1.95

Have Tube Sockets and Top Caps of all sorts. If you don't see it =

please ask.

Dusty Files Part 2, Favorite Amp Plans, 25 tube power amplifiers =

that may be constructed from generally available, =

reasonably priced parts.

Includes handy Resistance Coupled Amplifier charts. 9.95

=0D

Other Regular Stock Useful Items

Computer grade capacitors, clamp mount 1 3/8 dia. Made in England =

100 + 100 uF 500V 13.95      50+50 at 500V 9.95      =

40-20-20-20 uF at 500V Clamps add 1.50

Axial Electrolytic Capacitors Other lower voltages also stocked =

500V: 22 uF 2.95    47 uF 3.95

450V: 10uF 1.25    22 uF 1.79    47 uF 2.95    80 uF 3.50    100 uF 3.95

300V: 200 uF 4.95

160V 10 uF .39    22 uF .49    33 uF .49    47 uF .59    100 uF .99

50V 10 uF .19    22 uF .19    33 uF .19    47 uF .25      =

100 uF .29 220 uF .39 330 uF .49 1000 uF .95 1500 uF 1.50 =

2200 uF 1.95 3300 uF 2.50

25V 10 uF .19 22 uF .19 47 uF .19 100 uF .19 4700 uF 1.95

Note: When replacing electrolytics it is normally OK to replace with =

higher voltage, and/or with a value -20 % to +100% (or higher) than =

original. =

5 watt Zener diodes, 47, 82, 100, 110, 120, 130, 140, 150 volts, 1.95 each =

Diodes, 1N4007 1A 1000V, pack of 5, .95 2.5A 1000V pack of five 1.95

High Voltage Diode, 500 ma 12,000 volt PRV rating (wow!) 5.95 each

Neutrik XLR connectors gold plate contacts, black case, specify male or =

female, cord or chassis mounting. 4.95 each

Punch Kits, will punch all chassis above (up to 18 ga steel), covers all popular tube socket holes, 5/8, 3/4, 7/8, 1, 1 -1/8, 49.95 each

Lettering kits, dry transfer, for marking chassis. Specify Black or White = 2E =

Choose Audio Words (#AUD-1) Terminal Letters and Numbers (#TC-13) =

or Dial Marking (for volume/selectors, etc) (#DM-13) \$3.29 per large pack = 2E

FM Radio Alignment Tool Kit, has most popular types. #AT-1 1.95

Metal Film resistor kit, 100 pc, 20+ popular values 1/2 watt 1% 6.95

Power Resistor Kit, 100 pc, 20+ pop values 3 to 7W metal oxide 14.95 =

Tube Manuals, reprints, RCA (1959) 13.95, GE (1972) 12.95, WE 17.95

RCA Jacks, gold plated with teflon insulation and teflon washer to insulate =

from chassis. Same as Royce-style we used to sell. Red or Black 2.95 EA = CH

Insulated Gold Binding Post, 15A capacity. Red or Black. 2.95 EACH

Metal Gold Binding Post, with color-coded insulating washer. 15A capacity

Specify Red or Black. 2.95 EACH

Banana Plug, gold, takes up to 10AWG cable. Red or Black. 2.95 EACH

Spade Lug, gold, takes up to 10AWG cable. Red or Black. 2.95 EACH

Various esoteric audio wire & connectors, pls call for details

Mystery Polystyrene Capacitors Hard to find high voltage values.

These types rated 630V, 1% tolerance: 10 pf, 12 pf, 15 pf, 18 pf, 22 pf, =

27 pf, 33 pf, 47 pf, 56 pf, 68 pf, 82 pf 1-9 pcs 1.95 each, =

10-24 pcs, 1.59 each, 25 + pcs 1.35 each

Rated 630V, 1% tol: 100 pf, 120 pf, 150 pf, 180 pf, 200 pf, 220 pf, 270 =  
pf, =

330 pf, 390 pf, 1-9 pcs .99 each, 10-24 pcs .79 each, 25 + pcs .69 each=

Rated 630V, 5% tol: 470 pf, 560 pf, 620 pf, 680 pf, 750 pf, 820 pf

1-9 pcs .69 each, 10-24 pcs .55 each, 25 + pcs .49 each

Rated 630V, 5% tolerance: 1000 pf, 2200 pf, 3300 pf, 4700 pf

1-9 pcs .49 each 10-24 pcs .39 each, 25+ pcs .35 each =

Mystery Polypropylene Capacitors. All 10% tolerance. =

Quantity discounts as follows:

10 to 24 pcs, 20% off, 25 or more 33% off. Over 100:call for quote.

Rated 630V: .01 uF .45, .022 uF .45, .033 uF .45, .047 uF .45, .1 uF =  
=2E60 =

=2E15 uF .75 .22 uF .75, .47 uF .95 400V: .15 uF .50 .22 uF .60, .47 =  
uF .75, =

=0D

No voice mail, no brain-dead sales clerks, no audio gurus =

or secret Illuminati operatives.

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We accept VISA/MC/AMEX/DISCOVER

Terms of sale: No minimum order for credit cards or cash, however minimum=  
=

shipping charge (UPS)\$4.00 Heavy items charge is chart rate plus \$1.00 (U=  
SA) =

plus \$3.00 (export). =

UPS-COD (USA/Puerto Rico Only) add \$5.00. =

COD's are cash-only, \$50 min order, \$5.75 charge.

Illinois residents add 7.75% tax, Chicago residents & pickups add 8.75% t=  
ax. =

Most parts except for tubes and sale items can be returned for credit within =

30 days if with original packing and unused. Most Tubes =

(except sale items where noted) are warranted 3 months but tubes if defective =

are returnable for exchange only. =

Other items may be subject to 15% restocking fee. =

This normally waived if you apply credit towards another purchase. =

Please phone in advance if you wish to pick up parts at the office in order =

to avoid delays in filling your order.

No elves were harmed in the production of this catalog.=0C

=0D

Antique, Unique & European Tubes

Orig box unless otherwise noted "WB" white box. All unused NOS

except where noted. Items we can't test sold subject to your testing

EF37 (British 6J7 equiv) grey 6 pcs WB =

6L6 metal RCA 20 pcs

874 (4 pin voltage reg) 26

7054/8077 10 =

6080WC 3

EA76 Ampx 4 =

5V3/5AU4 USA Poss sub 5U4-GB 35 =

EF80 Misc >25 =

6686/E81L 4 =

E90CC Sie 10 =

6350 (USA) 5

6/30L2 Mazda (UK) 10 =

6360 4

EL821 Ampx 4 =

6227/E80L 7

6R4/EC91 Ampx 6 =



6197	20		
8106	5	=	
JAN-5725	>50		
EF800	Telfunken 2	=	
5824	10		
EL803-s	TF 10	=	
5755	10		
6688/E180F	Valvo 9, Rayth 6	=	
1629	3		
7056	22	=	
7060	11 pcs		
T-200,	sim to 211 but 200W, 2550V rating, 1 pc only	=	
6AR5	5	=	
8136	5	=	
6C6	20		
5847/404A	WE 11 WB	=	
6D6	10		
923	3	=	
715B	Raytheon 3 pc		
328A	Sylv 4	=	
5691	Sylvania 11	=	
337A	Sylv 4	=	
HY75	Hytron 1 pc		
403B	Ericsson >20	=	
4B32	3		
6FE5	"hot " sub for 6V6 30 pcs		
VVC-60-20	Eimac vacuum capacitor 1	=	
VC-100	vacuum capacitor 1		
822	Taylor 0B but used 2		
	=		
TW-150	Taylor used 2		

805 Taylor OB appears unused	1	=
375A 1 WB, looks OK, can't test		
8458/YL1240	Siemens WB don't have test data	1 =
6352 Philips, WB, looks OK		
6E5 RCA	5	=
EM34/6CD7 Mullard 1		
DM70/1M3 Mullard 3		
6J5-GT Raytheon, KenRad		=
7C5, (=3D6V6-GT loktal base) 15 pc		
12SN7-GT Tungsol, 1960 date code	30	=
6K6-GT USA 40		
CK 5702	8	=
5643 13 =		
8056 28393 3 =		
7895 Sylv 11		
7587	2	=
6CW4 Zenith (GE) 15		
6AG5	<100 pcs	=
6AL5/E91AA/5726 >200		
6C5 RCA/GE	>100	=
6F5 Rca & others >50		
6GK5 >400		
6CB6A	>100	=
6AU8 >100		
6DT6	>100	=
6AX4 400 OEM pk		
12AX4	100	=
6F5 RCA >50		
6F8-G	>50	=
6SL7-GT GE 20		
12FQ7 Japan >50		
5965A GE OB	>50	=

5965 GE WB 30  
5965 RCA OB 40

=

6AW8 >100  
6005/6AQ5/EL90 >150

=

19AX4-GTA >65  
5725W JAN >50

=

7258 (6AN8A with 12V fil) 50  
5696 >50

=

12AV7 Syl 30  
6HA5/EC900 >100

=

6GC5 >100  
6JC6A >100

=

6BN8 >25  
6GF7 RCA OEM pk >50

=

6ER5/EC95 >50  
6AF4A/6DZ4 >25

=

R-465 Hamatsu Photocell 50 pc

=

6FE5 30 pc

=

12AB5 Sylv(Webcor) 100 pc ( 6973 but 12V fil)  
6GK5 GE (UK & USA mfr) >400

=

6BN4 >25  
Ned Carlson, 773-871-7459 after 12 CT (after 1830 UTC)  
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vintage

Tube Amps

Tuners and accessories

Power outputs and descriptions are out of necessity brief and  
approximate. Please call for specific info on each piece.

=0CElite

Audio Services =

2225 W Roscoe St =

Chicago IL 60618

Ph 773-327-5652

=0CDynaco =

We have ST70=92s, PAS-3X=92s, =

FM-3=92s, and usually other misc items normally in stock. Please call for details.

=0CKnight/Allied

KN-1515, tube stereo basic amp, 6BQ5's (15W/ch), cute nice sounding amp

Allied 285 tube stereo AM/FM tuner, nice cond, metal cabinet, tuning meter

(2 pcs) KN-918 tube stereo integrated amp, single ended 6BQ5's (6 w/ch), both metal cabinets nice cond, amaze your friends and confound your enemies =

with this cute, simple amplifier

KG-35 mono tube FM tuner, good cond

KN-245 tube stereo AM/FM tuner, metal cabinet, nice cond

(3 pcs) KN-125B tube stereo/binaural AM/FM tuners, all w/ metal cab, nice cond

KN-110 mono FM/AM tuner, tuning meter, metal cab, faceplate a little rusty

KN-345 tube stereo FM/AM recvr, good cond

KN-125M AM/FM stereo tube tuner, with matching KN-750 stereo tube integrated amp, =

EL34's (35W/ch) both gold faceplates with metal cabinets

KB85 tube stereo basic amp, chrome chassis,

35W/ch (6L6=92s or EL37s) =93Mullard=94 circuit

=0CHH Scott

350-B stereo tube tuner, nice cond, working, wood cabinet

(2 pcs) 299 Stereomaster integrated tube stereo amp, both working, 1 metal cab, =

1 wood cab

use 6BQ5's (15W/ch), both nice cond

222 stereo tube integrated amp, 6BQ5's (15W/ch), nice cond

333-B Stereomaster tube AM/FM tuner, good cond

(2 pcs) 330-B tube AM/FM binaural tuner, one VG cond, =

on removable rack mount plate, other good cond but missing AM tuning knob

330-C tube binaural AM/FM tuner, nice cond, wood cabinet

LT-110B tube stereo AM/FM tuner, tuning meter, nice cond

=0CHarmon-Kardon

Award Series 300 Stereo integrated tube amp, 6V6's (15W/ch), nice cond working

"XAM" Mark IV, Same as Award 300, house brand made for EJ Korvette's (rem=

ember them?)

by Harmon Kardon. Be the first on your block to own a "XAM"!! with metal cabinet.

"XAM" Mark VI, stereo AM/FM tube receiver, 6V6's (15W/ch), nice cond, working,

another Korvette's special made by HK, "xam" bam thank you ma'am! With metal cabinet.

"Sonnet" AM/FM stereo tube tuner, with metal cabinet. Not fancy unit great tube sound reasonable price!

"Ballad" stereo integrated tube amp, 6BQ5's (15 w/ch), with metal cabinet=  
=2E Great clean 6BQ5 sound

T300X tube stereo tuner, exc companion to Award 300 stereo tube amp above=  
=2E

"Trio" stereo tube integrated amp, with metal cabinet, good cond, clean sound of 6BQ5's (15W/ch)

"Theme II" mono AM/FM tube tuner, good cond

=0D

=

=0C vintage Tube Amps

Tuners and accessories

Power outputs and descriptions are out of necessity brief and approximate=  
=2E =

Please call for specific info on each piece.

=0CFisher

500-B tube stereo rcvr, 7591's output (35W/ch) nice cond, working, missing knob caps, wood cabinet

101-B tube AM/FM binaural tuner, VG cond, working, magic eye tuner, gold faceplate

101 stereo tube integrated amp, 6BQ5's (15W/ch), nice exc blotch on front panel

KX-100, stereo tube integrated amp, 7868's (30W/ch), nice cond, needs tubes

FM-100-C tube stereo FM stereo tuner, great tube sound without remorgaging your house

TA-600 AM/FM stereo tube rcvr, good cond, dual tuner

80 AM/FM mono tube tuner, nice cond

101R AM/FM tube binaural tuner, VG cond

X-101-B stereo tube integrated amp, 7868's (25W/ch), good cond

500-S tube stereo receiver, nice sound, 6BQ5's (15W/ch), faceplate a little scratched up

70-A monoblock tube amp, sorry only have one!, uses 5881/6L6-GC (25W) good cond

X-101 stereo tube integrated amp, nice cond, wood cab

MPX200 stereo multiplex adapter, works with any mono tube tuner with mpx output. No case, complete

MPX100, same as MPX200 above, but has faceplate

=

=0D

=0CHeathkits

FM-4 tube mono FM tuner, nice cond, working, metal cabinet

(3 pcs) AA-32 tube stereo integrated amps, nice cond, working, use 6BM8/EC= L82 (10W/CH), =

two w/ metal cabinets

Heath stereo tube integrated amp, no mod#, nice cond, working

(2 pcs) AC11 stereo FM multiplex adapters, both complete with cabinets

=0D

=0CMiscellany

Challenger tube stereo integrated amp, 6BM8's (10W/ch), nice cond, metal cabinet

(2 pcs) David Bogen DB-20 mono integrated hifi amps, use 6L6/5881's, 20W = output,

"tubes on top" classic 50's hi-fi looks. Real hi-fi, not a PA amp!

(2 pcs) Eico ST70 & 1 pc ST40 tube stereo integrated amps, metal cabs, use (argghh!) 7591's, =

could be rewired for 6L6/5881. ST70 is 35W/ch, ST40 20W/ch

(2 pcs) Eico HFT-90 mono tube FM tuners, good cond

(2 pcs) Eric tube mono FM tuners, good cond

Grommes 55-PG tube mono integrated amp, small cute unit, uses 6V6's (12W) = , recent retube =

Grommes mono FM/AM tube tube rcvr, 6BQ5's (15W) output

Grommes 61-PG mono integrated tube amp, 6L6/5881 (20W) output, nice cond

(2 pcs) Grommes integrated tube stereo amps, 1 with metal cab, GC, other = nice cond but =

no cabinet, 6BQ5's (15W/ch)

Grommes mono AM/FM tube tuner, no cab, 6BR5 tuning eye

Hallicrafters 20W monoblock, 6L6's, made by Radio Craftsmen for Hallicrafters, =

same parts & circuit as C-500 Craftsmen amp

Herald tube stereo integrated amp, nice cond, metal cabinet, 10W/ch

(2 pcs) Home-brew Williamson circuit tube monoblock amps, 20W, ultralinear 6L6/5881 (20W), nice work =

Karg Labs tube FM stereo tuner, nice cond, needs cabinet

Kenwood KW-44 tube stereo AM/FM receiver, w/metal cab, 6BM8's (10W/ch), working

Pacemaker tube stereo integrated amp, 6AQ5/EL90's (10W/ch), nice cute small unit =

(2 pcs) Pilot AA-902, tube monoblock amps, 6L6's (25W) good cond, new Russian 5881/6L6WGC tubes

Pilot SM-244 tube stereo integrated amp, 6BQ5's (15W/ch), metal cab

Pilot AF-850 AM/FM mono tube tuner, nice cond, working, needs dial cord =

Pilot 240 stereo tube integrated amp, 6BQ5's (15W/ch) metal cab, nice cond

Pioneer SX-800 tube stereo AM/FM recvr, metal cab, 6BQ5's (15W/ch), nice cond, working

(2 pcs) RCA MI-series commercial AM/FM tuners, 18 tubes, 1 with rack mount frontplate

Radio Craftsmen RC-10 mono AM/FM tube tuner/preamp, nice cond, working

Sherwood S-2100, tube stereo FM/AM tuner, interchannel mute, nice cond, tuning meter

VM stereo tube integrated amp, 6BQ5's (15W/ch) nice cond, metal cab, unique looks!

Speakers (in pairs)

Jensen TF-3C, 10 inch woofers, 3 way system

Jensen EDI-203 2" by 6" (52mm X 156mm) horn tweeters =

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End of GLOWBUGS Digest 486

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